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CERTIFICATE OF MAILING

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Attorney Docket No.: NMTC-0756

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.97

Inventor: Youping Zhang
Title: METHOD AND APPARATUS FOR CONTROLLING RIPPLING DURING OPTICAL PROXIMITY CORRECTION
Filing Date: December 12, 2001
Serial Number: 10/016,837
Group Art Unit: 2825
Examiner: To Be Assigned

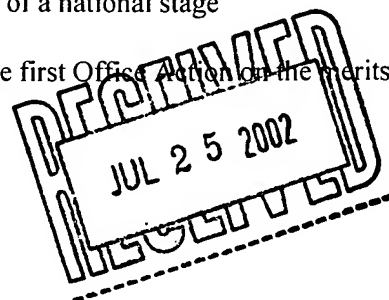
Listed below or on an attached Form PTO-1449 is information known to applicant(s) and submitted pursuant to 37 C.F.R. §1.56. A copy of each listed publication and U.S. and foreign patent, except for pending U.S. applications, is being submitted herewith, along with a concise explanation of information in a foreign language, if any, pursuant to 37 C.F.R. §1.97-1.98.

Applicants respectfully request that the listed information be considered by the Examiner and be made of record in the above-identified application. If form PTO-1449 is enclosed, the Examiner is requested to initial and return it in accordance with MPEP §609.

This statement is not intended to represent that a search has been made or that the information cited in the statement is, or is considered to be, material to patentability as defined in §1.56.

X This statement qualifies under 37 C.F.R. §1.97, subsection (b) because (check all that apply):

- (1) It is being filed within 3 months of the application filing date
 -- OR --
 (2) It is being filed within 3 months of entry of a national stage
 -- OR --
X (3) It is being filed before the mail date of the first Office Action on the merits.



— 37 C.F.R. §1.97(c). If this statement is being filed after the latest of: (1) three months beyond the filing date of a national application; (2) three months beyond the date of entry of the national stage as set forth in §1.491 in an international application; or (3) the mailing date of a first Office action on the merits, but before the mailing date of the earlier of a final office action under §1.113 or a notice of allowance under §1.311, then:

— a certification as specified in §1.97(e) is provided below; or

— a fee of \$240.00 as set forth in §1.17(p) is authorized below, enclosed, or included with the payment of other papers filed together with this statement. Please note that a check in the amount of \$240.00 is enclosed in payment.

— 37 C.F.R. §1.97(d). If this statement is being filed after the mailing date of the earlier of a final office action under §1.113 or a notice of allowance under §1.311, but before payment of the issue fee, then:

A. a certification as specified in §1.97(e) is completed below; and

B. a petition under 37 C.F.R. §1.97(d) requesting consideration of this statement is submitted herewith; and


C. a fee of \$130.00 as set forth in §1.17(i)(1) is authorized below, enclosed, or included with the payment of other papers filed together with this statement.

— Statement under 37 C.F.R. §1.97(e) - I hereby certify that either: each item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign patent application not more than three months prior to the filing of the information disclosure statement; or no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign patent application, and, to the knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in section 1.56(c) more than three months prior to the filing of the information disclosure statement.

Signature: _____
A. Richard Park (Reg. No. 41,241)

Date

Respectfully submitted,

By: 
A. Richard Park
Reg. No. 41,241

PARK, VAUGHAN & FLEMING LLP
508 Second Street, Suite 201
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Date: July 11, 2002

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INFORMATION DISCLOSURE CITATION PTO-1449	Atty. Docket No.	Serial No.
	NMTC-0756	10/016,837
	Applicant	
	ZHANG, Youping	
	Filing Date	Group
	12/12/2001	2825



FOREIGN PATENT DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	JP 3-80525	4/5/1991	JP			<input type="checkbox"/>	<input type="checkbox"/>
	WO 00/67074 A1	11/9/2000	WO			<input type="checkbox"/>	<input type="checkbox"/>
	GB 2,324,169 A	10/14/1998	GB			<input type="checkbox"/>	<input type="checkbox"/>


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INFORMATION DISCLOSURE CITATION PTO-1449 		Atty. Docket No. NMTC-0756 Applicant ZHANG, Youping Filing Date 12/12/2001	Serial No. 10/016,837 Group 2825
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
EXAMINER'S INITIALS	CITATION		
	Ackmann, P., et al., "Phase Shifting and Optical Proximity Corrections to Improve CD Control on Logic Devices in Manufacturing for Sub 0.35 um I-Line", SPIE, Vol. 3051, pp. 146-153, March 12-14, 1997.		
	Lithas, "Lithas: Optical Proximity Correction Software" (2 pages).		
	Precim, "Proxima System", Precim Company, Portland, Oregon (2 pages).		
	Precim, "Proxima Wafer Proximity Correction System", Precim Company, Portland, Oregon (2 pages).		
	Rieger, M., et al., "Mask Fabrication Rules for Proximity-Corrected Patterns", Precim Company, Portland, Oregon (10 pages).		
	Rieger, M., et al., "Using Behavior Modeling for Proximity Correction", Precim Company, Portland, Oregon (6 pages).		
	Cobb, et al., "Fast Sparse Aerial Image Calculation for OPC", SPIE, Vol. 2621, pp. 534-544, September 20-22, 1995.		
	Lucas, K., et al., "Model Based OPC for 1st Generation 193nm Lithography", Motorola Inc., IDT assignee to IMEC (12 pages).		
	Stimiman, J., et al., "Quantifying Proximity and Related Effects in Advanced Wafer Processes", Precim Compnay, Hewlett Packard Labs (9 pages).		
	Sugawara, M., et al., "Practical Evaluation of Optical Proximity Effect Correction by EDM Methodology", Sony Corporation (11 pages).		
	Saleh, B., et al., "Reduction of Errors of Microphotographic Reproductions by Optimal Corrections of Original Masks", Optical Engineering, Vol. 20, No. 5, pp. 781-784, September/October 1981.		
	Fu, C.C., et al., "Enhancement of Lithographic Patterns by Using Serif Features", IEEE, Transactions On Electron Devices, Vol. 38, No. 12, pp. 2599-2603, December 1991.		
	HaraFuji, K., et al., "A Novel Hierarchical Approach for Proximity Effect Correction in Electron Beam Lithography", IEEE, Vol. 12, No. 10, pp. 1508-1514, October 1993.		
	Rieger, M., et al., "System for Lithography Proximity Compensation", Precim Company, Portland, Oregon, September 1993 (28 pages).		

EXAMINER: _____

Date Considered: _____

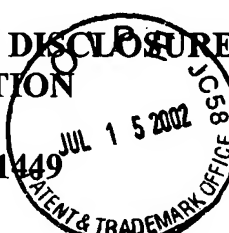
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)				
EXAMINER'S INITIALS	CITATION			
	Stirniman, J., et al., "Fast Proximity Correction with Zone Sampling", SPIE, Vol. 2197, pp. 294-301 (1994).			
	Stirniman, J., et al., "Optimizing Proximity Correction for Wafer Fabrication Processes", SPIE, Photomask Technology And Management, Vol. 2322, pp. 239-246 (1994).			
	Stirniman, J., et al., "Wafer Proximity Correction and Its Impact on Mask-Making", Bacus News, Vol. 10, Issue 1, pp. 1, 3-7, 10-12, January 1994.			
	Henderson, R., et al., "Optical Proximity Effect Correction: An Emerging Technology", Microlithography World, pp. 6-12 (1994).			
	Barouch, E., et al., "OPTIMASK: An OPC Algorithm for Chrome and Phase-Shift Mask Design", SPIE, Vol. 2440, pp. 192-206, February 1995.			
	Yen, A., et al., "Characterization and Correction of Optical Proximity Effects in Deep-Ultraviolet Lithography Using Behavior Modeling", J. Vac. Sci. Technol. B, Vol. 14, No. 6, pp. 4175-4178, November/December 1996.			
	Morimoto, H., et al., "Next Generation Mask Strategy - Technologies are Ready for Mass Production of 256MDRAM?", SPIE, Vol. 3236, pp. 188-189 (1997).			
	Park, C., et al., "An Automatic Gate CD Control for a Full Chip Scale SRAM Device", SPIE, Vol. 3236, pp. 350-357 (1997).			
	Dolainsky, C., et al., "Application of a Simple Resist Model to Fast Optical Proximity Correction", SPIE, Vol. 3051, pp. 774-780 (1997).			
	Chuang, H., et al., "Practical Applications of 2-D Optical Proximity Corrections for Enhanced Performance of 0.25um Random Logic Devices", IEEE, pp. 18.7.1-18.7.4, December 1997.			
	Asai, N., et al., "Proposal for the Coma Aberration Dependent Overlay Error Compensation Technology", Jpn. J. Appl. Phys., Vol. 37, pp. 6718-6722 (1998).			

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U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	5,631,110	5/20/1997	Shioiri, et al.	430	5	6/5/1995
	5,682,323	10/28/1997	Pasch, et al.	364	491	3/6/1995
	5,723,233	3/3/1998	Garza, et al.	430	5	2/27/1996
	5,815,685	9/29/1998	Kamon	395	500	9/15/1995
	5,825,647	10/20/1998	Tsudaka	364	167.03	3/12/1996
	5,991,006	11/23/0199	Tsudaka	355	53	10/27/1997
	6,081,658	6/27/2000	Rieger, et al.	395	500.22	12/31/1997
	6,289,499	9/11/2001	Rieger, et al.	716	21	1/7/2000
	6,243,855 B1	6/5/2001	Kobayashi, et al.	716	19	9/29/1998
	6,249,597 B1	6/19/2001	Tsudaka	382	144	12/17/1998

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